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CLAIMS

1. A method of managing product inventory levels, said method comprising the steps of:

monitoring the flow of product from one or more outlets to obtain product flow data for each of said outlets;

capturing the product flow data in real time and at a location remote from the outlets; and

depending on the product flow data for each of said outlets, controlling the delivery of product to said outlets to control their inventory.
2. A method of managing product inventory levels as defined in claim 1 wherein the step of capturing the product flow data involves capturing of the data within a database of a remote server which communicates with each of the outlets.
3. A method of managing product inventory levels as defined in claim 2 wherein the remote server functions support the control of the delivery of products to the outlets.
4. A method of managing product inventory levels as defined in any one of the preceding claims wherein the step of monitoring the flow of product includes monitoring the removal of product inventory from each of the outlets.
5. A method of managing product inventory levels as defined in claim 4 wherein the monitoring of the flow of product is performed without any integration into existing data collection devices.
6. A method of managing product inventory levels as defined in either of claims 4 or 5 wherein the removal of product inventory is monitored by counting the number of products departing the outlet.
7. A method of managing product inventory levels as defined in claim 6 wherein this counting of the product is effected by weighing a supply of the product and

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monitoring the weight loss which will be proportional to the number of products departing the outlet.

- 5 8. A method of managing product inventory levels as defined in any one of the preceding claims wherein the step of capturing the product flow data includes relaying the product flow data in real time from the outlets to the remove location.
9. A method of managing product inventory levels as defined in claim 8 wherein this real time relaying of the product flow data is effected by transferring this data across a communications network such as the Internet.
- 10 10. A method of managing product inventory levels as defined in any one of the preceding claims wherein the remote server communicates with distribution means and the step of controlling delivery of product includes the issuance of delivery instructions to the distribution means depending on the product flow data.
- 15 11. A method of managing product inventory levels as defined in claim 10 wherein the delivery instructions are directed to a warehouse from which the product is sourced and then delivered to the nominated outlet.
12. A method of managing product inventory levels as defined in claim 10 wherein the delivery instructions direct the warehouse to deliver product to a regional depot from which top-up deliveries to the outlets can be effected.
- 20 13. A method of managing product inventory levels as defined in any one of claims 10 to 12 wherein the delivery instructions are directed to one outlet of a regional cluster of outlets and whereupon product from said one outlet which has surplus product is delivered to a product-depleted outlet of the cluster.
- 25 14. A method of managing product inventory levels as defined in any one of the preceding claims also comprising the step of detecting and sending information relevant to the flow of product at one or more of the outlets to the remote location wherein this information is used to adjust the delivery of product including weather information.

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15. A method of managing product inventory levels as defined in any one of the preceding claims further comprising the step of sending operational data from the remote location to one or more of the outlets, said operational data including information which assists in determination of the product flow data.
- 5 16. A method of managing product inventory levels as defined in claim 15 wherein the operational data includes unitary product weights, and the supply of the product weighed relates to product of a substantially identical type and wherein the number of products departing the outlet are calculated by dividing the weight loss by the unitary product weight.
- 10 17. A method of managing product inventory levels as defined in claim 15 wherein the unitary product weight is deduced as a common divisor of a sequence of weight losses and the product count subsequently calculated based on this deduced unitary weight.
- 15 18. A method of managing product inventory levels as defined in any one of the preceding claims further comprising the step of analysing historical data to assist in the forecasting of future product flow.
19. A method of managing product inventory levels as defined in claim 18 wherein the analysis is conducted during a product flow period to forecast product flow with the same product flow period.
- 20 20. A method of managing product inventory levels as defined in any one of the preceding claims wherein the outlets are retail stores and the step of monitoring the flow of product involves monitoring the sales of product from each of the stores.
21. A system for managing product inventory levels, said system comprising:
- 25 means for monitoring the flow of product from one or more outlets so as to obtain product flow data for each of the outlets;
- means for capturing the product flow data in real time, said capturing means remotely communicating with the monitoring means;

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means for controlling the delivery of product to said outlets, said control means communicating with the capturing means and being configured to selectively deliver product to one or more of said outlets depending on their respective product flow data.

- 5 22. A system for managing product inventory levels as defined in claim 21 wherein the capturing means includes a remote server including a database within which the product flow data is retained, the remote server communicating with each of the outlets.
- 10 23. A system for managing product inventory levels as defined in claim 22 wherein the remote server communicates with the outlets via a communications network so that the product flow data can in real time be transmitted to the remote server.
24. A system for managing product inventory levels as defined in any one of claims 21 to 23 wherein the monitoring means includes means for counting product departing each of the outlets.
- 15 25. A system for managing product inventory levels as defined in claim 24 wherein said counting means is independent of a data collection device.
26. A system for managing product inventory levels as defined in claim 25 wherein this counting means includes means for weighing a supply of the product from which the weight loss is measured in order to deduce the number of products removed from the supply and departing the respective outlet.
- 20 27. A system for managing product inventory levels as defined in any one of claims 22 to 26 wherein the control means includes distribution means in communication with the remote server, the distribution means being configured to provide delivery instructions to a warehouse from which the product is sourced and delivered to the nominated outlet.
- 25 28. A system for managing product inventory levels as defined in claim 27 wherein the distribution means is configured to instruct the warehouse to deliver product to a regional depot from which top-up deliveries to the outlets can be effected.

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29. A system for managing product inventory levels as defined in either of claims 27 or 28 wherein the distribution means may be configured to provide delivery instructions to one outlet of a regional cluster of outlets and whereupon product from said one outlet which has surplus product is delivered to a product-depleted outlet of the cluster.
30. A system for managing product inventory levels as defined in any one of claims 21 to 29 also comprises historical data analysis means which is configured to analyse historical data to assist in the forecasting of future product flow.
31. A system for managing product inventory levels as defined in any one of claims 21 to 30 wherein the outlets are retail stores and the product is a sales product.
32. A method of counting product, said method comprising the steps of:
- weighing a supply of the product;
- measuring changes in the weight of the supply as a result of depletion or addition of product from or to the supply;
- identifying the product; and
- calculating or deducing the change in the number of products removed from or added to the supply, said calculation or deduction based on the corresponding change in the weight of the supply.
33. A method of counting product as defined in claim 32 wherein the step of calculating the change in the number of products is performed at a counting processor and the method of counting further comprises the step of relaying the changes in the number of products from the counting processor to a remote server.
34. A method of counting product as defined in claim 33 wherein the remote server includes a database having information pertaining to specific product types, including unitary product weights, and wherein the remote server transmits this information to the counting processor to assist in the calculation or deduction of the change in the number of products.

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35. A method of counting product as defined in any one of claims 32 to 34 wherein the step of weighing the supply of the product is performed continuously.
36. A method of counting product as defined in either of claims 33 or 34 wherein the weighing of the supply is conducted by scales communicating with the counting processor and wherein weight information from the scales is continuously or periodically transmitted to the counting processor.
37. A method of counting product as defined in any one of claims 32 to 36 wherein the step of calculating the change in the number of products involves dividing the corresponding change in weight by the unitary weight of the product.
38. A method of counting product as defined in claim 37 wherein the unitary weight of the product is empirically determined by monitoring changes in the supply weight from which a common divisor is calculated and which is assumed to be approximately equal to the unitary weight.
39. A method of counting product as defined in claim 37 wherein the unitary weight is determined independent of the counting method.
40. A method of counting product as defined in any one of claims 32 to 39 also comprises the step of identifying the type of product of the supply.
41. A method of counting product as defined in claim 40 wherein said identification is effected by comparing the unitary weight of the product with a schedule of unitary weights for given product types.
42. A method of counting product as defined in claim 41 wherein this identification step includes matching of the product unitary weight to that of the specified product type in the schedule.
43. A method of counting product as defined in claims 32 to 42 wherein the step of measuring changes in the weight of the supply includes time logging of changes in the number of products wherein product turnover for a predetermined period can be calculated.

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- 5 44. A method of counting product as defined in claim 43 (when it depends on claim 41) wherein the frequency of change is alone, or together with the step of identifying the type of product by the unitary weight comparison, used to identify the type of product of the supply wherein the product turnover frequency is compared and matched to a schedule of turnover frequencies for specified product types.
45. A method of counting product as defined in any one of claims 32 to 44 also comprising the step of eliminating spurious measurements of noise from the measurement of changes in the weight of the supply.
- 10 46. A method of counting product as defined in claim 45 wherein the elimination of noise this is effected by averaging raw weight data from the continuous weighing of the supply.
47. A system for counting product, said system comprising:
- 15 means for weighing a supply of the product;
- means for measuring changes in the weight of the supply as a result of removal or addition of product from or to the supply, said measuring means communicating with the weighing means;
- means for identifying the product; and
- 20 means for calculating or deducing the change in the number of products removed from or added to the supply, said calculation or deduction based on the corresponding change in weight of the supply.
48. A system for counting product as defined in claim 47 wherein the means for weighing includes a scale.
- 25 49. A system for counting product as defined in claim 48 wherein the means for measuring changes in the weight of the supply and the means for calculating or deducing the change in the number of products are together included in a counting processor which communicates with the scale.

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50. A system for counting product as defined in claim 49 wherein the scale is one of a plurality of scales each being dedicated to a product type and together communicating with the counting processor.
51. A system for counting product as defined in either of claims 49 or 50 wherein also
5 comprises a remote server communicating with the counting processor, the remote server being configured to receive data pertaining to changes in the number of products removed from or added to the supply.
52. A system for counting product as defined in claim 51 wherein the remote server
10 includes a database having information relevant to specific product types, including unitary product weights, and wherein the remote server transmits this information to the counting processor to assist in the calculation or deduction of the change in the number of products.
53. A system for counting product as defined in any one of claims 47 to 52 wherein the system also comprising means for identifying the type of product of the supply.
- 15 54. A system for counting product as defined in any one of claims 47 to 53 further comprising means for supporting the product supply on the weighing means, the product being dispensable from said support means.
55. A system for counting product as defined in claim 54 wherein the support means
20 is designed so that it insulates against external forces other than those associated with the removal or addition of product.
56. A system for counting product as defined in any one of claims 47 to 55 wherein the means for weighing, measuring changes in weight, and calculating or deducing changes in weight are installed at a store and the product is a sales product which has a short shelf life.